

Sum of Subarray Minimums [\(View\)](#)

Given an array of integers `arr`, find the sum of `min(b)`, where `b` ranges over every (contiguous) subarray of `arr`. Since the answer may be large, return the answer **modulo** `109 + 7`.

Example 1:

Input: `arr = [3,1,2,4]`

Output: 17

Explanation:

Subarrays are `[3]`, `[1]`, `[2]`, `[4]`, `[3,1]`, `[1,2]`, `[2,4]`, `[3,1,2]`, `[1,2,4]`, `[3,1,2,4]`.

Minimums are 3, 1, 2, 4, 1, 1, 2, 1, 1, 1.

Sum is 17.

Example 2:

Input: `arr = [11,81,94,43,3]`

Output: 444

Constraints:

- `1 <= arr.length <= 3 * 104`
- `1 <= arr[i] <= 3 * 104`